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HABERSHON, DISEASES OF THE ALIMENTARY CANAL, 16 PAGES.

CLINICS.

HOSPITAL NOTES AND GLEANINGS.

Ligature of the Subclavian Artery.—In lecturing lately on the subclavian artery, Mr. ADAMS, at the London Hospital, made the following observations on the subject of placing a ligature on that vessel: "You will perceive in the weekly journals the account of a case of axillary aneurism, in which a ligature was placed around the subclavian artery at St. Thomas's Hospital. This case appeared to be progressing very satisfactorily for a few days, but I have been informed that the patient has since died of hemorrhage under some violent action of the arm. Now you will find that many cases in which a ligature has been placed around this vessel have terminated fatally from hemorrhage. We are not much surprised at this, seeing that the impulse of the heart is so great on vessels in such close

proximity to this organ as the subclavian; seeing, also, that the clot which is formed in this vessel after ligature cannot be of much length, owing to the number of branches which spring from this artery so near to the seat of ligature. It has suggested itself to me that in such cases it would be desirable to try the application of the metallic ligature in preference to silk; and the plan I would suggest is this: to place around the subclavian a thin metallic ligature, to draw it moderately tight, and then to cut off the ends, and carefully to bring the parts together, so as to endeavour, by the aid of suitable compresses, to bring about a speedy and complete union of all the structures implicated."—*Lancet*, Feb. 19, 1859.

Paracentesis Thoracis with a Newly-invented Trocar and Canula.—On the 3d of February, a man, aged twenty-five years, was admitted, under Dr. FARR's care, into

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Luke ward, St. Bartholomew's Hospital, with extensive effusion into the left pleura, commencing in an attack of pleuritis three weeks before. The symptoms were very urgent, accompanied with considerable dyspnoea; the pulse 120, and the heart displaced towards the right side. At nine P.M. paracentesis was performed by Mr. Coote, who withdrew two pints and a half of this white pus, a character of fluid which Dr. Farre suspected to exist before the operation. About the same quantity flowed away through the bandages and dressings afterwards. This has been followed by much relief to the patient, who was quiet and easy when last we saw him, on the 5th instant.

The instrument is the invention of Mr. Thompson, of Westerham, in Kent, and has been used several times with success in tapping the abdomen. This was the first occasion of its employment on the chest. It consists of a straight trocar and canula, which are introduced in the usual way; from the side of the latter is attached a small gutta-percha tube of some length, and when the trocar is partly withdrawn (as far as the opening of the tube), it permits the fluid to flow into it, and thus escapes without the possibility of air entering the chest. The instrument is a simple and ingenious one.

In performing paracentesis, the trocar was entered between the sixth and seventh ribs, anterior to the border of the latissimus dorsi muscle.—*Ibid.*

Opium in Diseases of the Heart.—In the wards of M. Trousseau have occurred recently two striking illustrations of the extreme danger of the use of opium in diseases of the heart. One was that of a woman, the other that of a man; in both of whom death followed suddenly after the exhibition of a moderate dose of this drug. In the case of the latter there were evident symptoms of disease of the mitral valves accompanied by difficulty of breathing, ascites, and considerable oedema of the lower extremities. To relieve the breathing and the general feeling of uneasiness, the *Chef de Clinique*, at the urgent request of the patient, administered a dose of opium in combination with ether. Death almost immediately followed. This took place in the evening. On the following morning, M. Trousseau, finding the patient's bed empty, inquired into the circumstances of the death, and the simple

relation of what had taken place called forth the following remarks from the learned professor. First addressing himself to the *Chef de Clinique*, he said, in the plainest possible terms, "Sir, you have killed that man;" then, turning to the students he said: "Gentlemen, let these two cases be a warning to you when in the course of your professional duties you may be called upon to treat patients labouring under diseases of the heart. Whatever you do, be exceedingly chary in the use of opium, more especially in advanced stages of these complaints, as by its exhibition paralysis of this organ is almost sure to follow." The same rule also applies to cases of pulmonary phthisis in their later stages. If the pulse be weak and the expectoration be accomplished with difficulty, the use of opium will produce but one effect, that of hastening death.—*Med. Times and Gaz.*, Feb. 26, 1859.

Rapid Recurrence of Scirrhus of the Mamma.—The question of greatest interest and importance in the removal of cancerous parts relates to the period of immunity from the disease which the patient may enjoy. This, on the average, would seem to be about two years, but sometimes the disease will recur in a much shorter space of time. At St. Bartholomew's Hospital, on the 5th of February, Mr. Lawrence amputated the left breast of a woman, aged thirty-seven years, for scirrhus, a portion of which had been taken away seven months before. The cicatrix above the nipple was healthy; both, however, were included in an elliptical portion of integument removed with the breast. The disease had implicated some of the axillary glands, which were likewise carefully extirpated. The patient was a stout, apparently healthy, female, with a redundancy of adipose tissue.

On the same occasion, the right breast of a corpulent woman, aged fifty, affected with scirrhus for two years, was removed by Mr. Lawrence, together with a portion of the subjacent pectoralis major muscle, which had lost its usual healthy appearance. Beneath this muscle was found a gland of stony hardness, which it was deemed prudent not to leave behind. Both patients are for the present doing well.

Ovariotomy Operations.—In our last number (pp. 39–40) we gave a summary of twelve ovariotomy operations performed

last year in the London Hospital. In the *Medical Times and Gazette* of February 26, 1859, it stated that during the previous six weeks four more operations have been performed, every one of which terminated fatally. Thus, in sixteen cases there were eight deaths. What is somewhat remarkable is, that the four last fatal cases were all of them favourable ones for the operation.

[Prof. J. W. HAMILTON states (*Ohio Med. and Surg. Journ.*, Jan., 1859), that in Ohio 24 ovariectomy operations have been performed, of which 11 were successful and 13 unsuccessful.]

MEMOIR.

On Voltaic Narcotism for the Production of Local Anæsthesia for Surgical Operations. By BENJ. W. RICHARDSON, M.D., L.R.C.P., Physician to the Royal Infirmary for Diseases of the Chest, and Lecturer on Physiology at the Grosvenor-place School of Medicine.

Some six months ago I published, in the *Medical Times and Gazette*, a paper on electricity and local anæsthesia. In that paper, which has since been often referred to in the late controversies on so-called "electrical anæsthesia," I tried to prove by experiment that the electric current in no one of its applications could be made to produce insensibility to pain. I explained that the intermittent current, inasmuch as it produces counter shock, might, in sudden operations, such as tooth-extraction, remove the idea or the consciousness of pain caused by the operation, by a diversion of sensation. My experiments up to that time were conclusive in so far as the intermittent current was concerned, and in so far as related to the effects of powerful electrical discharges. They required to be strengthened, however, in respect to the influence of the continuous current—a requirement which I took ready pains to fill up; the result being, in so far as I could judge from observations of experiments made on myself, and on better subjects still for such work, rabbits and dogs, that the continuous current, however used, is incapable of producing any degree of anæsthesia in such way as to be applicable as an adjunct to surgical art. I say as an adjunct to surgical art, because I do not wish to state that the chemical force of a

continuous current might not be raised to such effect, as to cause insensibility in a living tissue, through which it should be passed. On the contrary, I think it could; but such insensibility would be bought at a great expense. It would be induced only by absolute decomposition of the tissues. It would be preceded by the infliction of unwarrantable pain, and it would prevent that reparative process which is essential to the success of surgical manipulation.

Should the occasion demand it, I may at another time and with a different object before me explain the facts on which this opinion is based; for the present I have in hand the explanation of a new mode by which anæsthesia may be very simply produced, and which I name VOLTAIC NARCOTISM.

Laying aside for a time experimental work with the electrical force, I began in September last to inquire as to the possibility of producing anæsthesia by other means. The phenomenon known commonly as the going to sleep of the limbs was first passed in review, and I found, after a little trouble, a method of placing my leg in such a position as to induce this phenomenon in a marked degree. But the result was nil as regarded the object before me; for I found, however thoroughly the limb was numbed by this process, that, although it might feel a dead weight and its muscles might disobey the will, that externally it was sensitive to the slightest impression, and that the needle point pushed into the skin created just the same amount of pain as in other and unaffected parts of the body. The phenomena produced by this process are in fact closely analogous to those produced in a part by the transmission through it of a rapidly intermittent current of electricity; there is first, the tingling sensation; and, secondly, the sensation of weight and so-called "sleep;" but the cutaneous sensibility remains the same.

I next turned attention to the application of the more powerful narcotics. The well-known fact that the tincture of aconite when applied to the lips produces a sensation of numbness presented itself naturally as open to inquiry; and I found that aconite and some other narcotics did produce a local insensibility which might possibly be turned to account in minor or superficial operations. But in the end I discovered that this method was very limited in its effects; for, even in

so thin a structure as a rabbit's ear, I could not, by the external application of narcotic solutions, produce any such degree of insensibility as to warrant me in proposing this plan as an anæsthetic process.

While these experiments with narcotics were under consideration, a thought occurred to me whether the combination of electricity with a narcotic would be of any avail. On the 31st of October I placed a sponge dipped in a solution of morphia on the arm of my friend, Mr. Gregson, and covering this with a copper plate connected with the positive pole of a small voltaic battery, and bringing the negative pole with a moistened sponge a little lower on the limb, I caused the current to pass; and produced in the course of a quarter of an hour a condition which I never obtained before; for on removing the poles I found that the part over which the narcotic had been applied was pale in colour, and, unquestionably, insensible to pain. Pricked with a needle, Mr. Gregson experienced no sensation; and although the experiment was very imperfect, and its effects transitory, it was sufficiently important to encourage further researches in the same direction.

Continuing these experiments for several weeks, and repeating them with different narcotic solutions on myself and on the ears of rabbits, I felt I might venture, with a convenient apparatus, to bring them more publicly forward. I obtained, therefore, a Pulvermacher chain consisting of 120 links or elements, each element having a surface of double extent as compared with the ordinary chain. The shock given by this chain on completing the circuit is slight even when it is in full action; while the chemical effects are exceedingly good, water being decomposed freely. I first applied this voltaic pile in conjunction with a narcotic to the ear of a rabbit. The ear was first well shaved; it was very sensitive, and a little scratch during the shaving process made the creature struggle and call out lustily. I then placed the ear between two copper plates with moist sponge interposing and connected the external plate with the positive and the internal plate with the negative pole of the battery. On establishing the circuit a slight expression of pain was evinced, and during the whole time of this application the animal was uneasy, and the plates held gently together by insulated spring clips, had often to be readjusted. At the end of half an

hour, on removing the plates, I found the ear slightly reddened in colour, and more sensitive to the needle point than before.

Satisfied as to the influence of the simple current, I now moistened the sponge connected with the plate of the positive pole, with tincture of aconite; and, moistening the opposite sponge again with water, I supplied the plates in the same way as before, and with the same pressure. In ten minutes I found that the margin of the ear would bear pricking without exciting movement; and at the end of the quarter hour, on removing the plates, the ear was as insensible as could be wished. I transfixed it in every direction, pinched it, incised it; but the animal was clearly unconscious that any auricular appendage belonged to it on the one side. The insensibility, very little lessened, was present two hours later in the day.

On January 29, of this year, I repeated the above experiment on the ear of a dog; my friends, Drs. Halford and Henry, and Messrs. Bainbridge and Gregson, being present, and lending their kind assistance. The sponge connected with the positive pole was moistened with a drachm of tincture of aconite, to which was added one grain of the alcoholic extract; and the plates secured with slips as before, were kept applied for thirty-five minutes. Then removed, the ear was found insensible at two points only; the plates, therefore, were once more applied with more narcotic solution, and were retained for thirty minutes. On removal, the ear was found pretty generally insensible over the parts where the plates had been applied. Transfixion could be made without the elicitation of pain; and Dr. Halford incised the ear transversely in a line nearly an inch long, without causing any expression of pain. Fifteen minutes later, the insensibility was such that the ear could be transfixed as before without exciting sensation; and at the close of twenty minutes Dr. Halford applied caustic freely to the incised wound with the same result. The animal, meanwhile, seemed exceedingly well. When his other ear was pricked he speedily let us know about it; and, for a few minutes, I think, from having been long held in a cramped position, he walked a little unsteadily; but he took food, showed nothing in the way of coma, and recovered without any unfavourable symptoms, the wound healing excellently well.

On the 1st of February, Dr. Halford and Mr. Bainbridge being present, the left hind leg of a dog was shaved. Around the upper part of the limb, I wrapped a broad copper band, including a sponge saturated with a solution made as follows: Tincture of aconite $\mathfrak{z}\text{ij}$; alcoholic extract of aconite $\mathfrak{H}\text{j}$; chloroform $\mathfrak{z}\text{ij}$. A third part of this solution was placed on the layer of sponge. Around the lower part of the limb, below the ankle, I wrapped another plate of copper inclosing a sponge saturated with water. This done, I connected the upper plate with the positive pole of the voltaic battery, and the lower plate with the negative pole, and at once set the battery in action. Eleven minutes after the establishment of the current, the parts included between the poles were so insensible that they could be transfixed at any point without exciting pain; and at twelve minutes Dr. Halford divided the tendo-Achillis by subcutaneous section, with the same result. The insensibility also extended for a short distance beyond the upper plate. The current was now sustained until the end of an hour, when the upper plate being removed, Dr. Halford proceeded to amputate the limb. The incision was commenced on the inner side of the leg some little distance, $\frac{1}{2}$ of an inch, below the knee, and was carried across the tibia to the outer margin of the fibula. The limb was then transfixed, and a flap obtained from the posterior half of the limb; a circular sweep was carried to separate the muscles, and the interosseous membrane was divided. Throughout all these steps of the operation, except in the last, the animal gave no wince or indication of pain; but in dividing the interosseous membrane, he drew up the limb; and in sawing through the bones he gave a scream, as if from pain or terror. In the after-steps, including the tying of two arteries and insertion of six sutures, there was no indication of pain.

Within twenty minutes, the animal had eaten two plates of meat, and walked about on his three legs with the utmost unconcern. The wound healed well and gave an excellent stump. On the day after this experiment I found that I could produce insensibility with equal ease in the lids and conjunctiva of the eye of a rabbit.

Subsequently I narcotized the hinder leg of another dog by the same process. The operation was done too hurriedly; the leg was badly shaved, and the plates did not fit.

The current was kept up for forty minutes, but long before this time the parts included between the poles were sufficiently insensible to allow of division of the tendo-Achillis by subcutaneous section. In amputating the limb, an operation performed by Dr. Halford, pain was evinced at one point in dividing the posterior flap, and much pain in sawing through the bones. In the other steps of the operation there was no expression of suffering. Seventeen hours after the operation Dr. Halford found it necessary to insert new sutures in the flaps. The parts were still so insensible that no pain was elicited. The wound, however, healed favourably, and the animal showed no sign whatever that could be considered unfavourable.

The first operation on the human subject under this anæsthetic process was performed by Dr. Halford on February 3. Dr. Halford had an infant patient ten weeks old, with a nevus about the size of a shilling on the right shoulder. The child was very irritable when it was brought to us, and continued troublesome; but we succeeded well with the operation. A ring of copper, lined beneath with moistened sponge, was made to surround the nevus, and was connected with the negative pole, while a disk of copper, which rather more than covered the nevus, and inclosed a thin layer of sponge, was adapted to the nevus itself, and was connected with the positive pole of the battery. This latter sponge, first moistened with water, was charged with narcotic solution consisting of five minims of the tincture of aconite and five of chloroform. After a quarter of an hour, during which the current was made, the narcotic sponge was removed, and the parts beneath were found to be quite white in colour. We reapplied the sponge for another quarter of an hour, with more solution, and, on removal, I believed the parts to be ready for operation; but Dr. Halford, wishing to be perfectly sure, urged two more applications. He then transfixed the nevus through the base with two long needles, and ligatured the mass with all the firmness he could; but neither transfexion nor ligature gave any pain. Directly after the operation the infant fell asleep, and the recovery was as simple and quiet as could be desired.

On February 4, Mr. Kempton, of Princes Street, Hanover Square, gave me an opportunity of trying this narcotic system in a

case of tooth-extraction. The tooth was the last upper left molar, and very firm. It was hollow externally, and the cavity admitted of being easily filled with a dossil of lint steeped in a narcotic solution composed of five minims each of tincture of aconite and chloroform. Mr. Kempton, after introducing the narcotic, connected a fine excavator with the positive pole of the battery; and with the point of the excavator pressed on the lint while I placed the negative pole, tipped with moistened sponge, externally, immediately below the lobe of the left ear. Our apparatus being imperfect for the purpose, and the application of the poles being dependent on the hands, contact was sometimes broken, and occasional slight shocks were given, at which the patient has since complained. These were accidental, and avoidable in another case. After an application of five minutes, I removed the poles, and we found that a sensation of numbness had commenced in the tooth, and extended superiorly and laterally, from the tooth as a centre. A new dossil of lint, again saturated with narcotic solution, was inserted in the tooth, and the poles reapplied. In two or three minutes the sensation of shock was not felt—even when contact was intentionally broken. After seven minutes, the poles were removed, and Mr. Kempton extracted the tooth without the patient experiencing the slightest sensation. He explained that he could hear the breakage between the tooth and its socket, but without the merest trace of pain.

On Saturday last I punctured a bursa on the wrist of a girl by subcutaneous section. The plate connected with the negative pole of the battery was placed on the anterior part of the wrist, while the bursa was covered with a disk, which inclosed a sponge holding five minims of a tincture of aconite, made from the alcoholic extract, and five minims of chloroform. This application was three times repeated for sixteen minutes. After the second application the parts to be operated on were white, and at the time of the operation were so insensible that the patient whose head was averted had no consciousness at all that anything was being done. Sixteen hours later the centre part where the narcotic had been applied was still partly insensible. The case did well.

As a test experiment, I placed on another portion of the arm of this patient a narcotic solution made in the same way as that

which had been used with the voltaic current. The solution was also applied in the same way under a copper disk. On removal after half an hour the skin beneath was slightly reddened, but there was no insensibility.

The tincture of aconite used in this operation was made by dissolving the alcoholic extract in alcohol, in such proportion that each drachm of the tincture produced contained five grains of the extract.—*Med. Times and Gas.*, Feb. 12, 1859.

SANITARY AND SOCIAL SCIENCE.

Parentage vs. Nativity.—We extract the following remarks on an important subject from the "Fourth Annual Report on the Births, Marriages, and Deaths, in the city of Providence, for the year ending December 31, 1858, by EDWIN M. SNOW, M. D." These remarks illustrate one particular point in which the mortality reports of the city of Providence differ from nearly all similar reports in this country, and the reasons for this seem to have great weight. A bill for the registration of births, marriages, and deaths, is now under consideration by the legislature of Pennsylvania, and we must express the hope that in this bill the *birth-place of the parents of the deceased* will be required to be entered in the register:—

"In reports upon mortality, it is customary to divide the population into classes, and show the number of deaths, and other particulars, in relation to each class. Thus, we show the number of deaths of males and females, of whites and coloured, of married and single, of native and foreign, the number in different localities, and the number at different periods of life.

One most important object of this division into classes, is to show the effect of the different natural and artificial circumstances in which the population is placed, upon the mortality of the community; and thus to acquire knowledge in relation to the original causes of disease and death. The application of such knowledge to the removal of the causes of disease, and its connection with measures for the improvement of the public health, is obvious.

For the purpose of obtaining such information, particularly in the cities of this

country, the most important of all these divisions into classes, is the classification according to parentage—the classification according to Parentage as distinguished from the classification according to Nativity.

In all reports upon mortality in this country, except in this city and in Boston, and in the last two Rhode Island Reports, no distinction is made between parentage and nativity; or rather, the nativity alone is given, and no reference is made to parentage.

It is well known, that the foreign population, as a class, in this city, and in other cities in this country, are under entirely different sanitary influences from the American population. The greater portion of the foreign population live in a miserable class of tenement houses, with all the want of conveniences, and positively injurious influences of such houses; their social habits are not calculated to preserve health; and a knowledge of the laws of hygiene is entirely wanting among them. Of course, the children of foreign parents are subject to the same injurious influences upon health, and suffer from them more than the parents themselves.

It is evident that any classification of mortality statistics should include the children in the same class with their parents. This is done by the classification according to parentage; but the classification according to nativity, would include nearly all the children of foreign parents with the American population. In other words, the division of the population, according to nativity, makes two classes, as follows:—

The first class includes Americans and their children, and also the children of foreigners. The second class includes only adult foreigners.

The effect of the two kinds of classification, by parentage and by nativity, is shown by the following examples:—

The number of deaths, in Providence, during three years past, 1856 to 1858 inclusive, was 3,007. Classed according to nativity, or birth-place, there were of

American Nativity	2,443
Foreign Nativity	564
Total	3,007

Classed according to parentage, there were of

American Parentage	1,378
Foreign Parentage	1,431
Total	3,007

This shows that, in the classification according to nativity, 867 children of foreign parents are included with the American population, though they are really subject to all the sanitary, social, and other influences of the foreign population. For all purposes of sanitary, or any other investigation, it is evident, that these children should be included with the foreign population.

Take another example. During the month of September, 1858, there were 86 deaths in the city of Providence. Classed according to nativity, there were, of persons

Born in United States, 80 deaths; av. age 18.3 y'rs.	
Born in other countries, 6 " " " 30. "	

Classed according to parentage, there were of

American Parentage, 42 deaths; av. age 34.3 y'rs.	
Foreign Parentage, 44 " " " 6.3 "	

Can there be any doubt which is the correct classification?

Take a third example. During three years, 1856 to 1858 inclusive, there were 156 deaths in the city, from cholera infantum. Classed according to nativity, there were of

American Nativity	156
Foreign Nativity	0
Total	156

Classed according to parentage, there were of

American Parentage	55
Foreign Parentage	101
Total	156

Thus, nearly all the mortality reports of cities in this country, as they give only the classification according to nativity, show that none but Americans die from cholera infantum.

These examples are sufficient to show, that the classification of mortality statistics, according to parentage, particularly in our cities, should be adopted for all purposes of sanitary, and other investigation. They also show, that the classification, according to nativity, has no value whatever; but, on the contrary, gives erroneous information, and is only calculated to mislead and deceive the inquirer after truth.

Believing in the truth, and in the importance of these views, I have, in the mortality reports of the city of Providence, made all the classifications and analyses of the facts, according to parentage. The results obtained, as shown in this, and in the preced-

ing reports, have been of a most surprising character, and, in my opinion, fully show the correctness of the plan adopted.

One fact, resulting from the recapitulation of three years' statistics, may be given here. The number of deaths, in Providence, of persons of foreign parentage, during three years, 1856 to 1858 inclusive, was 1,431. But if the deaths of persons of foreign parentage had been in the same proportion to the population living, as those of American parentage, the number would have been 1,097, or 334 less than the actual number. In other words, if the foreign population had been in the same circumstances, and under the same sanitary influences as the American population, 334 lives would have been saved, in the three years, or *more than one in five of all who died*, of the foreign population.

This fact could not have been learned by a classification, according to nativity. On the contrary, the classification, according to nativity, would show that the annual mortality, during the last three years, has been one in 41 of the persons living, of American nativity, and only one in 70 of those living, of foreign nativity. It is difficult to perceive any value in a fact of that description."

Influence of Occupations on Health—We present from the *Sanitary Review* (January, 1859) some further remarks on this very interesting subject—

5. *Fur-dyeing* is another art, the evils of which to the artisan are many, and as serious as manifold. In the young and feeble workers, phthisis is the prevailing malady, in the more advanced chronic bronchitis in its most persistent form. These are the maladies. Let us but sketch out the nature of this occupation, and the mischief of it will not be far behind in the mind.

The object of the fur-dyeing process is threefold:—

1. To make bad furs look perfect.
2. To make the fur of one animal resemble that of another and different animal.
3. To change the colour of various furs.

The materials employed by the fur-dyer for the completion of one or other of these processes are—nitric acid, sal ammoniac, liquid ammonia, antimony, verdigris, litharge, alum, copper, copperas, lime, pearlsh, soda, and gall-nuts. The nitric acid is used as a cleansing substance, and also as a staining material to impart a yel-

low tint to some skins and to lighten the colour of skins which are black. The sal ammoniac, lime, litharge, and soda, mixed up together into solution with water, are employed to remove grease from skins that are going to be turned into a dark colour. The skins are brushed over with this solution.

The colouring fluids used are, first, as we have said, nitric acid. Secondly, a solution made as follows: Copperas, one pound; water twelve pints. This solution is used for producing a very black dye. Thirdly, a solution made thus: Gall-nuts roasted and ground into a powder, one pound; copperas, three ounces; sal ammoniac, two ounces; verdigris, two ounces and a half; litharge, one ounce and a half; copper-dust, two ounces; sumach, three ounces; these are all mixed together with water, so as to make in the whole three quarts of solution. This colouring solution gives either a light or a dark brown dye; light if much water is used, or if only one dressing is given; dark if the solution is concentrated, or if the fur is many times washed over with it.

When a fur is going to be coloured, it is washed over either with nitric acid or with the solution of sal ammoniac, lime, litharge, and soda, named above. The skin is then dried and the dust is beaten out of it; then the colouring solution, whichever it may be, is applied with a stiff brush, time after time, until the desired shade is obtained.

For the colouring of grenadier's bearskin caps, gall-nuts are boiled with the solution to be employed. The grenadier's cap is soaked in the solution.

A variety of other solutions have been tried in the fur-dyeing business, such as indigo, muriate of tin, and muriate of iron. They all fail. The muriate of iron colours the fur, but destroys the skin.

The injuries to health arising from this business occur at different stages of the process. In the first step, where the solution of nitric acid is being applied, a curious set of symptoms appear. As the nitrous acid fumes are inhaled, the mouth, tongue, and fauces are rendered dry and irritable, there is constant constipation, there is constant headache, and the pain in the head is invariably situated in the back part. Later, the skins, moist with the acid solution, are placed (it is the fact) in an air-tight heated chamber to dry. When the door of this chamber is opened, there is a perfect flood

of acid vapour set free, in which the workmen are bathed. The effect of the inhalation is invariably to cause cough, dryness of the mouth and throat, constriction of the chest, and pain in the head.

When, instead of nitric acid, the second solution described above is used for the removal of greasy matter from the skins, ammoniacal fumes rise and excite a continued hacking cough, a languor and a headache which can hardly be borne; a stranger to the work cannot tolerate it at all. The drying, after the application of this solution, is done as before, in a large air-tight chamber heated to 130° or more. The workmen have often to enter this room and remain in it several minutes for the purpose of removing dried skins and turning drying ones. The effort against absolute suffocation is tremendous during the performance of this duty.

It is but right to add that in some manufactories, as at Appold's, the principles of common sense in drying have prevailed, and that a ventilating shaft has been introduced into the heated chamber, through which the gases can escape. In smaller manufactories, no such provision is made.

A third and serious mischief is produced by the inhalation of the dust during the beating of the dried skins which have been previously soaked in the copperas solution. The dust thus discharged produces constant irritating cough, and the teeth are almost invariably affected by it; these organs are slowly rendered brittle and generally carious. The grinding down of the colour stuffs from the crystalline to the pulverulent state leads to similar evil consequences. Thus in every part of this business the workmen inevitably suffer.

The remedies of a preventive kind in this occupation are obvious. The exposure to the nitrous acid fumes is removable by free ventilation. The dusting process could all be done by machinery similar to that used for common threshing purposes, and the grinding of the powder by mill-work. There is no class of occupation requiring more urgent reform than the fur-dyeing manufacture.

6. *Cigar and Snuff-Making* are businesses accompanied by results little less injurious than those arising from the aforementioned pursuits. The manufacture of cigars consists in rolling up the leaves of the tobacco-plant into the cigar shape; or, in inferior cigars,

in rolling up the leaf over a quantity of broken up tobacco leaf together with siftings, and even with the sweepings of the shop. The unanimous testimony of several workmen whom we have examined is to the effect, that, in the most common cigar, tobacco leaf is always used. There is no other leaf, such as cabbage-leaf, used in the process.

At a further stage of the process, the cigar is placed in the drying-room. During drying the room is charged with vapour, which has much the same effect on the body as tobacco smoke.

In making snuff, tobacco-leaf is finely cut up, well dried, and then pulverized together with an incongruous collection of foreign matter; lime, salt, flour, dust-sweepings, and, in yellow snuffs, lead; or, as one workman remarked, "anything else, as everything does for snuff that will powder fine." The mixture once made, it is placed in a bin, and heat is applied. Two or three times the mixture is removed from the bin to be turned. The heating process gives a sharpness to the snuff.

When the sharpening experiment is concluded, the mixture is sent to the mills to be ground and well dried. Then it is sifted; and lastly, the "liquor" is added to make the powder weigh heavier. The liquor is a solution of common salt and water. The hotch-potch is now finished, and is ready for the nose of the unfortunate consuming sufferer, whom may it continue to please.

The evils to the workmen abound. The rooms in which they work are close, unventilated, and filled with dust, which inhaled, gives rise to throat irritation, cough, and vomiting. Sifting the snuff is in this way more hurtful than rolling the dust cigar. The inhalation of the vapour from the cigar drying-room sets up in young hands all the symptoms of tobacco poisoning; dryness of throat, cough, headache, and vomiting are the prominent symptoms. In snuff-making, the turning of the mixture which is being heated in the bin sets up the poison symptoms even more effectually. The young workman at this department is seriously poisoned; he grows faint and sick, and suffers from violent head symptoms. His consolation is that he shall get used to the poison if he only sticks to it; and, as far as acute symptoms are concerned, he is not, as a general rule, deceived. The sifting of the

dried and ground snuff is followed by analogous effects.

But it is not to be presumed that the disease symptoms stop where we have left them above. The system of the workman becomes tolerant in some measure; but the tolerance is only partial. There are induced, by continued application, chronic maladies which do not so easily desert him, and which sometimes costs him his life. Pulmonary consumption is one of these diseases. In less serious cases, dyspepsia, anemia, and rapid and irregular action of the heart present themselves as symptoms, and continue so long as the occupation is the means of obtaining that daily bread which is purchased to supply a poisoned body.

We must not omit to mention, that the occupation leads to excessive abuse in the habits of smoking and chewing tobacco. One man informed us that some workmen seemed as if they could not exist unless they were smoking or chewing.

From these combined evils few workmen, if any, escape; they are rarely able to follow their employment beyond the age of two score years.

In relation to the mischiefs due to the cigar and snuff manufactures, many philanthropists would doubtless offer a sweeping recipe. They would do away with the evil wholesale. We, taking a more practical view, and feeling that any attempt to suppress the business altogether is untenable, would simply suggest palliative measures. These would consist in securing a thorough ventilation of the work-rooms, a plan for turning over the drying snuff with the mouth and nostrils of the turners protected, and the sifting of the snuff by machinery worked in closed boxes or small chambers.

Sanitary Improvements in London.—It appears, from a recently printed return, that the medical officers of health in the various Metropolitan Districts are actively and energetically engaged in the work of sanitary improvement. In Marylebone, sanitary orders have been issued and satisfactorily executed in 2,635 cases as regards houses, and in 2,000 minor nuisances. And so throughout London has this work of purification been going on during the past year. Pigs and dung-heaps are got rid of, cow-sheds and slaughter-houses improved. In Holborn 1,480 houses have been thoroughly improved, and others closed or pulled down.

When will legislators in this country awake to the importance of similar improvements in all our large cities, by which the sufferings from sickness will be diminished, and life prolonged? When will those who intrust their highest interests to their representatives select for such office those who are sufficiently enlightened to understand that protection from sickness and prolongation of life are matters of as much importance to their constituents as the promotion or protection of pecuniary interests?

MEDICAL NEWS.

DOMESTIC INTELLIGENCE.

Army Medical Board.—The following official notice of the meeting in Philadelphia of a Board of Army Surgeons, to examine assistant surgeons and candidates, has just appeared in Washington:—

WAR DEPARTMENT, ADJUTANT GENERAL'S OFFICE,
Washington, March 4, 1859.

Special Orders, No. 37.

A Board of Medical Officers, to consist of Surgeons C. L. Finley, J. M. Cuyler, and S. P. Moore, will assemble at Philadelphia, Pennsylvania, on Friday, the 1st day of April, 1859, or as soon thereafter as practicable, for the examination of assistant surgeons for promotion, and of such candidates for appointment to the medical staff as may be invited to present themselves.

Assistant Surgeon C. H. Crane is appointed Recorder of the Board.

By order of the Secretary of War,
S. COOPER, *Adjutant General.*

Applicants must be between 21 and 25 years of age.

Applications must be addressed to the Secretary of War; must state the residence of the applicant, and the date and place of his birth. They must also be accompanied (*references will receive no attention*) by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the medical staff.

Pennsylvania Medical College.—Dr. ALFRED STILLE has resigned the chair of Practical Medicine in this school, which he has filled for several years with eminent credit

to himself and to the great advantage of his pupils. His withdrawal will be a great loss to the school, and one which they will find it very difficult to adequately supply.

Medical College of the State of South Carolina.—Dr. E. GEDDINGS has been elected to the chair of Practice of Medicine in this school, rendered vacant by the death of Dr. Gaillard. Dr. G. some years since occupied this chair with distinction, and his learning and experience afford a guarantee that the appointment will be a most auspicious one for the school.

Pennsylvania Hospital.—Dr. J. FORSYTH MALES has been elected one of the physicians to this institution to fill the vacancy created by the resignation of Dr. PEPPER. Dr. Meigs' reputation and experience justify the expectation that he will acceptably perform the duties of his new position.

Medical Department of the University of Buffalo.—AUSTIN FLINT, JR., M. D., has been appointed Professor of Physiology and Microscopy; and SANFORD EASTMAN, M. D., Professor of Anatomy in this school.

The Saint Joseph Journal of Medicine and Surgery.—This is the title of a new journal published bi-monthly under the auspices and supervision of the members of the Saint Joseph Medical Society, Missouri. The Editorial Committee are J. H. Crane, M. D., O. B. Knobe, M. D., and G. C. Catlett, M. D. The only number we have received is that for March (No. 4), which is in every respect creditable, and we wish our new contemporary success.

Medical College of Virginia (Richmond). Dr. THOMAS D. WARREN, of Edenton, N. C., offers a prize of one hundred dollars for the best essay presented to the Faculty at the next session, by a member of the graduating class.

University of the Pacific Medical Department.—The establishment of a Medical College at San Francisco, Cal., is announced. The regular course of lectures will commence on the first Monday in May, 1859, and be continued eighteen weeks. The following constitute the Faculty: J. Morrison, M. D., Professor of Pathology and Principles and Practice of Medicine; Isaac

Rowell, M. D., Professor of Chemistry; R. Beverly Cole, M. D., Professor of Physiology, Obstetrics, and the Diseases of Women and Children; E. S. Cooper, M. D., Professor of Anatomy and Surgery; B. R. Carman, M. D., Professor of Materia Medica; and Hon. Geo. Barstow, Professor of Forensic Medicine.

Medical Classes, Session 1858-1859.—

University of Pennsylvania	409
Medical College of the State of South Carolina	195
Jefferson Medical College	570
Med. College of Virginia (Richmond)	70
Medical College of Georgia	165
Buffalo Medical College	67
Shelby Medical College	53
St. Louis Medical College	135
Med. Dep. University of Michigan	143
Savannah Medical College	34
Kentucky School of Medicine	103

Medical Graduates in 1859.—

University of Pennsylvania	144
Jefferson Medical College	256
Med. Depart of Pennsylvania College	33
College of Physicians and Surgeons, New York	58
University Medical College, N. Y.	128
New York Medical College	23
Buffalo Medical College	13
Medical College of Georgia	58
Savannah Medical College	8
Kentucky School of Medicine	28
University of Louisville	35
Med. College of Virginia (Richmond)	20
St. Louis Medical College	40
Missouri Medical College	23
Shelby Medical College (Nashville)	11

Wistar's Balsam of Wild Cherry.—We have received the following note from a son of the late eminent professor of anatomy in the University of Pennsylvania, Dr. Caspar Wistar, in relation to this article, with a request that we should publish it:—

"I deem it to be my duty to state that my father, the late Dr. Caspar Wistar, had no connection whatever with the medicine sold as 'Dr. Wistar's Balsam of Wild Cherry.' I avail myself of this opportunity to mention that I have never had any connection with the said preparation.

"MIFFLIN WISTAR, M. D."

PHILADELPHIA, March 9, 1859.

OBITUARY RECORD.—We have received with deep regret intelligence of the death of Dr. THOMAS D. MUTTER, Emeritus Professor of Surgery in Jefferson Medical College, which took place in Charleston, S. C., on the 16th of March.

— We regret also to have to record the death, on the 13th of February, in Rome, of Dr. C. F. BECK, of this city.

— Died at Springfield, Mass., Feb. 28, WILLIAM TULLY, M. D., eminent as a pharmacologist. He was engaged in the publication of a work on that subject, of which the first volume only is completed.

— at Greenfield, Mass., June 8, 1858, in the fifty-seventh year of his age, SILAS DEANE, M. D. Dr. D. was not only an eminent physician but an excellent naturalist; his name is inseparably connected with the discovery of fossil foot prints in the sandstone of the Connecticut Valley.

FOREIGN INTELLIGENCE.

Diphtheria.—At a recent meeting of the Medical Society of London, a very interesting paper on diphtheria was read by Dr. W. R. ROGERS, who gave a concise history of the nature and pathology of the disease, illustrated by several cases which had fallen under his own notice. The work of Bretonneau was the foundation of our modern views on diphtheria; and the descriptions of that accurate observer were found to be verified by the cases which had lately occurred in this country. Dr. Rogers thought that diphtheria was a totally distinct disease from scarlatina, with which, indeed, it had but few features in common; although the fact that the throat was affected in both often led to errors in diagnosis. Dr. Rogers did not believe that the existence of the *oidium albicans* was an essential feature of diphtheria, but was rather to be regarded as an accidental complication. The best treatment of diphtheria consisted in the application of local remedies, such as hydrochloric acid, with an equal quantity of glycerine, and the administration of nutritious food and stimulating beverages—the quantity of beer and wine which patients could bear being often quite astonishing. Dr. Harley, in the course of the discussion which followed the reading of the paper, offered some highly important observations on the nature of the diphtheritic pseudo-membranes, and

the mode of their formation. From a careful examination of these structures he had come to the conclusion that they were not to be regarded as fibrinous membranes, but rather as layers of coagulated mucus mixed with epithelial scales, and gradually concreting and solidifying into tubes and casts. He thought with Dr. Rogers, that the presence of the *oidium albicans* was not essential to the disease, and in many well-marked cases which he had carefully examined with the microscope, he could find no trace of the parasitic fungus; but in one case, where he had not found the fungus at first, he found it some hours afterwards, so that he considered the latter found a nidus in the diphtheritic exudation in certain cases. The very insidious nature of the disease was alluded to by most of the speakers; and from the absence of any well-marked symptoms at the commencement, treatment was too often neglected until after the period when it could be useful. Diphtheria should be regarded as a blood-disease of a peculiar nature, attended invariably by the production of a pseudo-membrane on some region of the body, and the early treatment consisted in cauterizing the part where it first developed itself, and at the same time supporting the strength of the patient. Tracheotomy, which is the only resource—and that a hazardous one, in the cases where the trachea is lined with a false membrane—was very little discussed at the meeting from want of time.—*Med. Times and Gaz.*, Feb. 5, 1859.

New Function of the Placenta.—M. BERNARD has discovered a new function of the placenta. "It is destined to perform the glycogenic office of the liver during the first periods of foetal development, before the liver has acquired its full and complete structure. The function is performed in the glandular or epithelial element, which is found in certain animals to be mixed up with the vascular part of the placenta; in the ruminant class this epithelial element exists separate from other parts, and so as to form plates of an epithelial character on the amnion. No doubt every observer has noticed these, but their signification has been hitherto misunderstood."—*Med. Times and Gaz.*, Feb. 5, 1859.

Skoda on Typhus.—"We consider that the disease here is one, and ought to be

called abdominal typhus; that the typhoid fever of the French is not to be distinguished from what they call typhus; that exanthematic typhus does not constitute a specific affection, and that it is nothing else than the union of ileo-typhus with the accidental appearance of different cutaneous exanthemata."—*Med. Times and Gaz.*, Feb. 12, 1859.

Artificial Anus.—How long can an individual live with an inguinal anus, made soon after birth, in consequence of a total absence of the anal orifice? This question was lately answered by M. Rochard, chief surgeon of the Seamen's Hospital of Brest. This gentleman sent a paper to the Academy of Medicine of Paris, founded upon five cases, the subjects of which were operated upon soon after birth, and an artificial anus made in the left groin. The patients have all lived to a more or less advanced age, one of the operations having been performed by Duret so long ago as 1793. Two questions arose after the favourable report of the paper made by M. Robert: 1st. Shall the surgeon, in cases of imperforate anus, search for the lower end of the rectum within the pelvis, if, previously to incising the perineum, he cannot feel the rectal pouch? 2d. Shall the artificial anus be made in the groin or the loins? Many children have died from the handling of the pelvis and the search after the lower end of the rectum, which sometimes is not found at all. From the discussion and the merits of the question, it would appear that it is safer to open the groin than to cut through the perineum, if the pouch is not felt. As to the second question, it is obvious that the fear of wounding the peritoneum, and of giving rise to hernia, should not make us give up the inguinal anus, as this said infirmity is better concealed and managed by the patient in the groin than in the loins.

Deaths from Chloroform in Paris.—Two deaths have within a short period occurred in Paris from the inhalation of chloroform.

The first we shall notice is the following, related to the Paris Society of Surgery, by M. RICHET:—

A mechanic, aged 43, was admitted to the St. Louis, January 15, on account of a dislocation of the left shoulder; he being a muscular subject, to all appearance in the enjoyment of good health. He stated that the acci-

dent had already occurred twice on the same side before. The accident had occurred a few hours prior to admission, and next morning, January 16, M. Richet, after demonstrating all the signs of a subcoracoidian luxation, tried in vain to reduce it by the ordinary procedures without the aid of chloroform. A few drops of chloroform were now poured upon a piece of linen rolled into the form of a cone, the nose and mouth entering the cone, and the patient being in the horizontal position. No effect being produced at the end of about a minute, the compress was removed in order to be imbibed with another small portion of chloroform—the whole quantity employed during the entire period of application being from four to five drachms. The period of excitement commenced only some seconds after this new dose. The muscles stiffened, the patient pronounced some incoherent words, and sought to get away from the chloroform; his face became flushed, the veins of his neck were swollen, and the conjunctivæ were injected. All this lasted but for a few seconds. The patient, who had thus far inspired very little chloroform, now made some deep inspirations in succession, and anaesthesia with muscular resolution followed. The pulse, carefully watched on both sides during the whole procedure, furnished no indication. Tranquil and well developed at first, it became smaller and more frequent during the stage of excitement, to afterwards resume its former calm and full condition. From three to five minutes elapsed between commencing the inhalation and the production of muscular resolution. Respiration being quite regular, the cone was removed, and M. Richet attempted reduction as before by making direct pressure on the head of the bone. Failing in this, he took hold of the lower part of the humerus with his right hand, and impressed a rotatory movement upon it (without exerting any traction whatever), at the same time that he pressed the head of the bone towards the glenoid cavity with his left hand. The reduction was thus effected with the greatest ease.

M. Richet was about remarking upon the facility with which reduction was effected without traction, when it was announced to him that the pulse had ceased beating at both wrists. The respiration continued calm and deep, without any stertor or abnormal sound. It was now found that the heart had entirely ceased beating. The

windows were thrown open and cold water applied to the face. The features were nowise disfigured, the face was rather coloured than pale, the lips and conjunctivæ being slightly reddened. Suddenly, after five or six rapid and deep inspirations, respiration ceased abruptly. Drawing the tongue out of the mouth, M. Richet, by pressure on the thorax and abdomen, practised artificial respiration. All this was the work of an instant; and, for a moment, the functions seemed to be about to be re-established, the patient making three large and deep inspirations at intervals of a few seconds. This hope was delusive, for the action of the heart could not be re-established, in spite of the continuance of artificial respiration for more than half an hour, and the application of every description of stimulus. The extremities soon became cold, and the face, which had retained its normal colour, was now pale, and all hope of resuscitation was abandoned.

A very minute account is given of the autopsy, performed twenty-four hours after death; but we will only notice the chief points. The lungs on being divided at their anterior half presented an entirely normal appearance; but posteriorly they were violaceous in colour, and somewhat more friable in their texture than in the natural state; a good deal of thick black blood flowed out on incision, but they swam in water. The heart was flaccid, soft and large. No coagulum, and only a little black fluid blood was found in the ventricles; but the auricles were somewhat distended with this fluid. There was, in fact, nothing remarkable about the heart, except its extreme flaccidity, and the slightest consistency of its fleshy fibres, which were torn with the pressure of the finger with an incredible facility—the autopsy being conducted in a very cold room. The veins of the thorax, abdomen, and limbs were filled with black blood; but neither in these nor in any other part was the presence of gas or the odour of chloroform discernible. In the viscera of the abdomen there was nothing noteworthy; and in the cerebro-spinal system no abnormal congestion, or other morbid appearance, was found.

On analyzing all the details of the case, M. Richet rejects the explanation of the death by asphyxia or syncope, and believes that it was due to sideration of the nervous system, as in the experiments by MM. Cos-

and Gosselin; the contractions of the heart becoming paralyzed either by the medium of the nervous system, or directly by the action of blood charged with chloroform, and hence rendered incapable of exciting the central circulatory organ.

The second case was the following, communicated to the Surgical Society of Paris, by M. MARJOLIN:—

A little girl, aged seven years and a half, on whom forcible straightening of the hip-joint was to be performed, had suddenly died from the effects of the inhalation of chloroform. The quantity inhaled was within one drachm, and the apparatus used a simple sponge. The pulse was carefully watched from the beginning, and apparent anaesthesia had twice taken place, the child, however, crying and struggling each time the diseased joint was handled. On the second occasion the surgeon was on the point of again desisting, when the agitation and cries suddenly ceased. Circulation had stopped, and neither cool air, slapping, artificial respiration, nor electricity could re-establish it. The efforts at resuscitation were continued for three-quarters of an hour. The autopsy revealed congestion in the cerebral and thoracic cavities; but no special lesions nor strong smell of chloroform were noticed. Some of the blood, kept for four days, did not coagulate, and chemical analysis did not lead to the detection of chloroform. When the diseased joint was examined it was found, before laying it open, that motion backwards was impossible; on opening it, the synovial membrane was noticed to be covered, through its whole extent, with fungous excrescences, some hanging loose, the others adherent. They were most numerous where the synovial membrane is reflected on the femur, on a level with the cul-de sac of that region.

Accidents Occurring after Revaccination. Mr. M. H. LARREY, in a communication to the Academy of Medicine, gives an authentic account of the accidents which had followed the revaccination of certain artillerymen stationed at Toulouse. Sixty men were revaccinated on the 21st of June, with the usual precautions, from the arms of healthy adults. In nine of these serious accidents supervened, which were dividable into two categories, viz., general accidents of a typhus form, and local accidents of an erysipelatous

form. The former occurred in three of the cases, and in these local accidents only appeared consecutively. In the other six the local symptoms appeared after, to be followed secondarily by fever. These cases were, however, no less serious than the others, for all the phenomena of severe phlegmonous erysipelas were developed. One fact is to be remarked, viz., that with the exception of one, in all the cases, although vaccination had been performed in both arms, engorgement was only observed in the right arm. In appreciating the causes of this singular occurrence, M. Larrey adverts to the unusually high temperature, and to the fact that erysipelas was all that period prevalent in Toulouse. The artillery at that time, too, had to undergo unusual "fatigue," and it was ascertained that several of the "men had declined to avail themselves of the exemption of grooming their horses allowed for some time after revaccination." The force of this latter circumstance is seen in the fact that all the men were seized in the right arm, with the exception of one who was left-handed.—*Med. Times and Gas.*, Jan. 15, 1859, from *Bulletin de l'Académie*, tome xiiii.

Vegetable Parasites of the Human Skin.

Mr. Jabez Hogg read an interesting paper on this subject before the medical society of London (January 24, 1859), the object of which was to show the fallacy of the theory propounded by certain physicians, who attributed certain special diseases of the skin to a vegetable parasite peculiar to each disease in question; thus, that the porrigo favosa (the cupped or honeycombed ring-worm of Willan) is caused by a parasitic fungi called *achorion Schönleinii*; that the porrigo scutulata of Willan is due to the parasite *trichophyton tonsurans*; that the porrigo decalvans is due to the *microsporon Andouini*; that sycosis or mentagra is due to the *microsporon mentagrophites*; and that the pityriasis versicolor is due to the *microsporon furfur*. The author combated this hypothesis by exhibiting the microscopic appearances of the fungi which were found in the products of these diseases, and showed that the same fungi were common to all, as also to other skin-diseases not included in the category of other authors; and summed up his arguments as follows: Fungi are well characterized throughout nature by feeding on effete or decayed matter; the fungi supposed to be peculiar to certain diseases of

the skin were also found in many other diseases of the cutaneous surface; competent observers had not been able to find them in those peculiar diseases; sporules and filaments, described as the cause of one definite disease, had been found in the products of another definite disease, supposed to have a parasite of its own, differing from this and peculiar to itself; and, lastly, attempts had been made in vain to implant these parasites in the healthy skin; hence one could not but conclude that the whole theory was erroneous, and that special parasites peculiar to and productive of special diseases did not exist. It was the author's conviction that the fungi found on the skin and hair were not primarily the cause, but rather the result, of disease. Mr. Hogg concluded by sketching the natural history of the vegetable parasites, with a view to illustrate the subject by analogy.—*Brit. Med. Journ.*, Feb. 26, 1859.

Caucasian Insect-Powder.—The so-called Persian, but properly termed Caucasian insect-powder has long been known to the Trans-Caucasian populations, under the name of "Guirila." In that paradise of vermin, it is an article of a very considerable commerce, and is not only carried inland through Russia in large quantities, but is also exported to Germany and France. A large dépôt exists at Vienna. It is a coarsely-ground powder of a green colour, and penetrating odour, formed of the flowers of the *pyrethrum carneum*, and *roseum*, which grow in the Trans-Caucasus at a height of 5,000 or 6,000 feet. This powder possesses the peculiarity of rapidly stupefying the insects, which soon afterwards die. Strewed about the room or the bed, it proves a poison to fleas, lice, flies, etc. In the military hospitals in hot countries it is an invaluable preventive of the formation of maggots in wounds, and the more so inasmuch as its use is attended with no disadvantage, unless employed in large quantities in closed bedrooms, when it may give rise to confusion in the head, such as is produced by flowers or new hay. It has been long used as a means of preserving insects; and cannot be too strongly recommended to those who have the care of herbarian and other natural history collections, liable to the depredations of insects. Unfortunately the demand for the powder has been so great of late as to lead to its adulteration by the addition of the stalks

and leaves of the plants to the flowers, and to the mixing of the new with stale powder. As a general, the powder purchasable in Germany is very different from the Asiatic in colour, smell, and efficiency.—*Medical Times and Gazette*, March 5, 1859, from *Buchner's Report*.

Surgeons in the British Navy.—The following extract from a recent speech in the House of Commons of the first Lord of the Admiralty, Sir JOHN PAXIMOTON, gives encouraging assurances that the position of these officers will be improved, and that the same comparative rank and emoluments will be allowed them as has been given by a recent warrant to their brethren in the army:—

"In answer to a question put to me yesterday, I stated that I should avail myself of this occasion to allude to a subject which has lately excited very great interest—viz., the present position of the surgeons of the Royal navy. (Hear, hear.) I am sorry to find that my answer has been very much misunderstood. I by no means intended to imply that I had any doubt or hesitation as to the course to be adopted. On the contrary, I then meant, as I mean now, to express in distinct terms my opinion that the present position of the surgeons in the navy is not satisfactory. (Hear, hear.) But I go still further. The complaints we now hear from these officers are, no doubt, much founded upon the late warrant issued in respect to the army; but I think that even before the date of that warrant the surgeons of the navy were not relatively placed on an equality with their brethren of the army. Now, however, they have an unanswerable claim to the consideration of their country. Nothing in the military service could be nobler or more gallant than the manner in which the medical officers of the navy have discharged their duties under the most trying and painful circumstances, and they are, therefore, entitled to more liberal treatment than they now receive. Their claim is based upon two grounds—first, it is due to them as gentlemen that their position should be improved, and, secondly, public policy requires that the services of this most useful branch of the profession should be more highly appreciated and better requited, so that able and efficient men may not be deterred from joining the navy. It is, therefore, our intention in spirit and in substance to concede to naval

surgeons the advantages which they justly seek to obtain. At the same time I will not and cannot now commit myself to the exact mode in which that object shall be carried out. The peculiarities of the naval service may render it inconvenient to follow the precise rule pursued in regard to the army; but these and other points of detail will be duly considered before our plan is finally decided upon."—*Med. Times and Gaz.*, March 5, 1859.

Fothergillian Gold Medal of the Medical Society of London.—This medal for the present year has been awarded to Mr. A. T. H. WATKINS, of Liverpool, for an essay on the Anatomy of the Human Lung.

John Hunter's Coffin.—It will be interesting to the profession to know that the remains of the illustrious JOHN HUNTER have been discovered in the vaults of the Church of St. Martin-in-the-Fields, London. By an order in council the parish authorities were required to remove all mortal remains from beneath this church. Mr. Frank J. Buckland, Assistant Surgeon 2d Life-Guards, and Mr. Quekett, Curator of the College Museum, were allowed leave to be present during the removal of the coffins from Vault, No. 3, a work, Mr. B. states, requiring immense labour and much time. Mr. B. states: "On the afternoon of Tuesday, February 22d, I was rewarded by finding the coffin of John Hunter, underneath several others, and towards the back of the vault—being, in fact, almost one of the last to be removed. It is in excellent preservation, the cloth only upon it having decayed in places; the handsome brass plate is as perfect as when originally engraved; the coat of arms is uninjured, and the inscription clear and distinct. It runs as follows:—

John Hunter,
Esq.,
Died Oct. 16th,
1793.
Aged 64 years."

It is proposed that the profession in London should accompany the remains to its last resting place, and that the opportunity should be now taken advantage of to erect a monument to his memory. A general subscription among the profession in all countries might be made to obtain means to erect such a monument.